



TVA


Balancing Authority Operations

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Manager BA Operations

NERC Mission

- The North American Electric Reliability Council's (NERC's) mission is to ensure that the bulk electric system in North America is reliable, adequate, and secure.
- NERC accomplishes this mission by:

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- Setting and enforcing standards for the reliable planning and operation of the bulk electric system.
 - Certifying reliability service organizations and personnel.
 - Assessing the historical and near-term reliability, and future adequacy of the bulk electric system.
 - Providing reliability training and education resources.
 - Facilitating information exchange, system modeling, and analytical methods and tools as needed for reliability.
 - Interfacing with organizations in industry and agencies of the federal, state, and provincial governments in North America on reliability matters.
 - Working with industry and government to coordinate the physical and cyber security of electricity infrastructure.

- TVA Accomplishes its part in supporting the NERC mission by adhering to the following standards

- Standard INT-003-0, Section B, R1.1-4
 - Each receiving balancing authority shall confirm interchange schedules with the sending balancing authority prior to implementation in the balancing authority's ACE equation and shall agree on the following:
 - BA's that implement interchange schedules shall use the same start times and ramp duration
 - Interchange schedule start and end time
 - Energy profile
 - Ramp start and duration

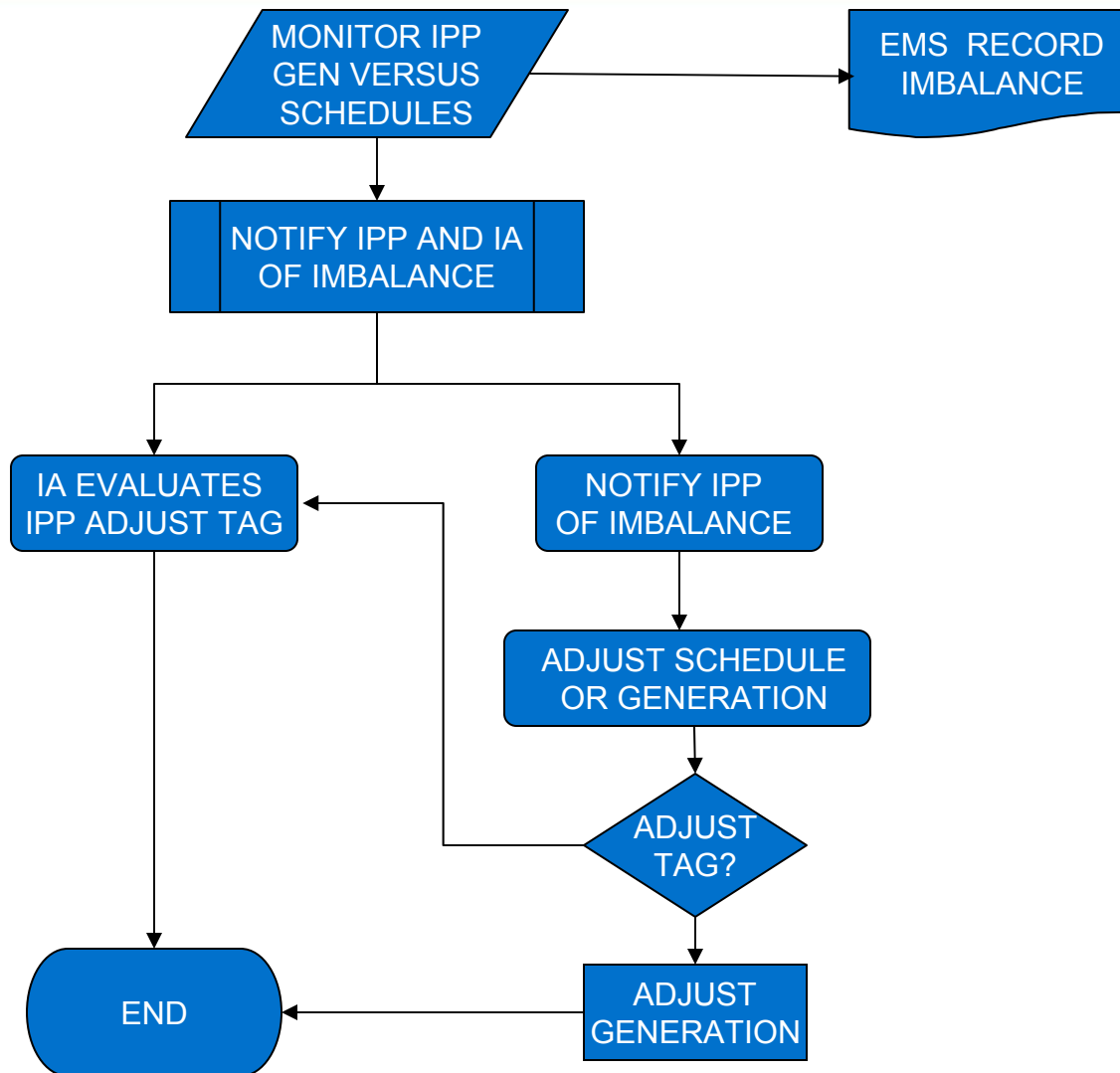
- Standard INT-002-0, Section B, R3
 - Balancing Authorities are charged with “**assessing and approving or denying** the Interchange Transaction”,


- Approve/deny actions of original schedule requests or modifications to existing schedules subject to:
 - NERC Policy 3, section 1.6 - “Ability of generation maneuverability to accommodate the indicated energy profile (i.e. **verify ramping capability, availability**).
 - ***The new NERC Standard INT-002-0 uses this language***, “Energy Profile (ability to support the magnitude of the transaction): and “Ramp (ability of generation maneuverability to accommodate)”.
 - R5 in that same section of the Standards goes on to state, “**shall operate such that Interchange Schedules do not knowingly cause any other systems to violate established operating criteria**”.

- Independent Power Producer

IPP

- MONITOR REAL TIME GENERATION FROM EACH IPP
- COMPARE GENERATION TO APPROVED SCHEDULE TOTAL FOR IPP
- NOTIFY IPP & INTERCHANGE SCHEDULING OF REQUIRED ADJUSTMENT IF OUTSIDE BAND
- ENSURE ADJUSTMENT HAPPENS IN ALLOWED TIME FRAME.
- PROVIDE NECESSARY DOCUMENTATION OF ANY IMBALANCE PERIODS EXCEEDING ALLOWED BAND





Loss of Generation and Schedule Adjustment

- If a generation resource becomes unavailable that will prohibit the covering of a schedule, the schedule should be adjusted as soon as can be accommodated to a level equal to the instantaneous generation capability NOT what the generator will integrate for the hour. Schedule changes require a minimum of 20 minutes notice for E-Tag, but TVA will adjust the schedules sooner if the situation permits, and coordination between the source and sink can be confirmed BUT WE WILL NOT ADJUST SCHEDULES TO A TIME THAT HAS PASSED.

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